Food Habits

225 The food habits of all but a very few of the insects are totally unknown to the Indians but they do have accurate and detailed knowledge of the food habits of fish. This is probably due to the great economic importance of fish to the Seris. They also have very full data for the mammals, including bats, which are said to be insectivorous. The responses varied concerning lizards and often did not parallel the situation in nature. In some instances, the acuteness of the observation was remarkable. Thus, the Northern Crested lizard, Dipeosaurus dorsalis sonorensis, which occurs on the sands of Rancho San Francisco, inland from Desemboque, has been mentioned as climbing trees after fruit. Even more unusual, the leopard lizard, Crotaphytus wislizeni, was said to feed on other species of lizards. And indeed, it is one of the very few species of lizard in the region which habitually devours others of its own kind.

Mating Seasons, Eggs and Nesting

In most of these aspects of natural history the native information is quite deficient. In the case of birds, it is assumed that mating occurs in early spring, that the eggs are laid a month later, that in another month the young hatch out and about the third month they fly from the nest. This sequence seems to represent a conventionalized idea rather than a reflection of direct observation. Another difficult question for them to answer, with respect to the reptiles, was whether the young are born alive or whether they hatch from an egg. Only a few of the species are correctly described, among them the rattlesnakes. Sharks and mantas are said to give birth to live young.

Guesses as to the number of eggs varied from fairly accurate estimates for some of the birds to rough approximations ("many") for some of the reptiles and most of the fishes. The knowledge of bird nesting habits was fair. The informants had no difficulty in pointing out the particular localities where one or another species of bird nests nor in the identification of the nest by its shape and construction. This was especially true of the cormorants, egrets, sea-gulls and pelicans. All these are either marine or shore birds as will be noted.

Animals: Venomous and Otherwise Feared

171 In contrast to the Mexicans, the Seris fear relatively few animals and they are almost always those which can inflict a vicious or toxic bite or sting. The Mexicans, on the other hand, are afraid of a great many animals. European folklore plays a part in this as does unfamiliarity with the desert and the consequent fear of it.

The Seris fear most the rattlesnake, both the Western Diamondback and the Sidewinder. These snakes, they say, bite with their fangs but the venom is located in the rear of the body, about two inches in front of the anus. A plant called "humco" (?) is used as a remedy both in the form of a drink and as a dressing for the wound. The Mexicans claim this remedy is effective. The coral snake is also considered to be venomous although the Seris believe that its bite is fatal only to Mexicans and not to themselves (!). Most of the

*825 [171] an idea from one animal to another.[13] The *Xanthusia* does not share this similarity to the salamander in appearance, but it is found along with the gecko and behaves much like the gecko when exposed to the light. Hence, perhaps, comes the association.

I excluded here from the discussion the red racer because the notions concerning it are conflicting, with some informants insisting that it is toxic and can cause death and others that it is not. But all agree that it'll bite—and painfully so.

Finally the toad. The toad, although unagressive and considered as such, is feared a great deal as a repository of all sorts of toxic traits. There was some disagreement as to its ability to bite, with some informants thinking that it does bite with its tongue, others thinking it can't bite at all. But all agree on the following attributes of the amphibian: venom in body, toxic on touch, always fatal to eat to most animals and to all men. In [262] this the toad joins the gecko and the *Xanthusia*. These too are believed to be fatal to eat and these three represent the only animals in this class that are considered inedible.

It is interesting that the list of toxic (though non-fatal) animals should also include the *Phrynosoma* although here there seemed to have been again disagreement between the informants. The lizard is perfectly harmless and actually will not [763] bite even in self-defense. But the Seris say it causes swelling.

●752 278 For the rattlesnake bite, the remedy is a plant called *Kásox*. An extract of this plant is made after boiling it in hot water and then it is taken orally. It is also applied to the wound and, the Seri say, it must be taken all day long for a full day. The Seris take this when they are harmed by these snakes. This plant is supposed to be found in the mountains near Kino but not in the Desemboque or Tiburon area. But in addition to their own medicaments, the Seris, especially the younger fellows, will make use of the regular anti-venom available at the school or mission.

Attitudes Toward Reptiles and Amphibians

*825 With the few exceptions, these animals are not particularly feared. Those that are feared are considered dangerous in some ways, and, in fact, most of them are either by their ability to inflict painful bite or by possession of venom. But otherwise, their attitude seems to be very much a matter of fact and one of unconcern, which seems to corroborate Kroeber's opinion of the Seris' psychological makeup in other matters.

[13]Since this has been written, I have plenty of evidence that the gecko is similarly dreaded in many parts of the world.

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9:Malkin E-5 (1953-1955)1962 MU31 Seri MU31

* 825 it is said to live "in refuse, fish and fish offal and only in the fishing camp." This is one that one must reconcile with the Seris' simultaneous belief that it is parasitic on dogs and that it sucks human blood as well. More difficulty here creates their belief that it is found only in the camp but that the dogs on Tiburon are free from it.

The Phasmids interestingly are associated with trees and sticks, a very correct notion and the Mantids also with the trees.

However, the information is incomplete and apart from the few cases cited above usually contradictory and hazy.

Toxic Insects

Only 19 species out of 92, or little more than 20% of the total, are considered toxic in anyway. Unlike in most of the other phases of the Seri knowledge of the natural history of insects, the natural groupings are quite clear. The three main groups the Seris consider toxic or harmful are the Arachnids, the Arachnoids (*Acarina* included) and the *Hymenoptera*, all very much as one would expect. In addition few beetles and bugs complement the list of the dangerous creatures. tures.

Among the *Hymonoptera* are all of the species listed, with the exception of the bee. This may be due to the fact that the bee in the Seri country is the stingless Melipoind (?). Of the toxic kind, *Pepsis* (the Tarantula hawk) is probably most feared. The sting the Seris think is very painful but disappears after a few minutes as it contains little venom. A plant is applied to the bite and also taken internally with hot water. The *Pepsis* must be really feared because the informants assured me it was one insect the children preferred not to play with—an excellent confirmation of the caution. *Chlorion aeriatus*, the Sphecid wasp, induces similar symptoms by its sting. Here as a cure, Vic's mentholate tablets were said to be used, smeared on the injured spot. This cure is also applied by the Mexicans and the Seris probably adopted it from them. The sting of this wasp is considered more dangerous to children than to adults. The Velvet wasps[12] (Multillids) are also supposed to sting with the rear of the body causing some pain. Finally the *Hemisia*, and Anthrophorid bee inflict a good bite but otherwise are harmless.

[152] [157] [752] [177] [753]

Arachnids on the whole are more feared than the *Hymenoptera* and include what the Seris believe to be the most dangerous of all terrestrial arthropods, with a very good justification. The effects of the damage inflicted by these creatures is more lasting and overpowering. The Black Widow easily takes first place and is feared as much as the gecko or the rattler. Some Seris even claim it is the most dangerous of all creatures. It may cause death, they say, although usually one can do with a 2-3 day illness. However, to small children the bite (or as they say "sting" owing

[753]

[12] *Ptiloglossa mexicana* causes swelling and much pain lasting 2-3 hours and is considered most unpleasant of all Hymenopterans.

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* 825 to the belief that the spider stings with the rear of the body) may cause death in 2-3 hours. It may [753] also kill chicks and one of the informants, Jose Juan Moreno, claimed to have been paralized by the sting of the Black Widow for eight days . . . . [158] However, Juan is a good hypochondriac, and even when not apt to exaggerate, he may have suffered a genuine trauma owing to an encounter with this spider. While smaller spiders are not considered too dangerous, the *Tarantula* is. It can both bite with its jaws and sting with the rear end of the [753] body and it is said to be more dangerous to children—it may cause their death at times. The adults will weather its attack but will become quite ill. [752] As remedy for its bite, a plant *quivira* is used as a hot extract taken in a small glass for 2-3 days.

Almost all of the animals closely related to the Arachnoids, the scorpion, the Sun spider, *Scolopendra* and the tick, are also venomous in the Seri view. Of these, the scorpion is most feared, and in adults it will cause illness lasting up to a week while to very small children it may be fatal. As a proof the informants mentioned a six months old [165] girl recently stung by a scorpion who died in less than six hours—the fact confirmed by the Mexicans in the village. Remedy for this is similar to [762] others—a plant called *amx.xuhây* is drank with hot water for three days, a glass per day.

The Sun spider, also armed supposedly with a sting at its rear, is said to be fatal to horses for whom there is no remedy. This is a pure fiction. [177] but the belief is common among the Mexicans and the Seris certainly took it up from them. But no one suggested that the Sun spiders are in any way harmful to men although they are avoided, just in case.

The *Scolopendra* is considered very dangerous, much like a viper. It bites badly but is not fatal. Actually, the story probably concerns another species, for *Scolopendra malkini* has only recently been described and is rare in Desemboque.

The tick's unpleasant traits had already been discussed under another heading. All that is essential to add is a belief that in addition to other ex- [753] ploits it can enter a person's ear causing much pain and that for this reason it is particularly bad for the children, as there is no remedy.

There remain three more species of various degree of toxicity. Of these, the *Triatoma* is most conspicuous both for its effects and factual observation. This blood sucker bites with its mouth parts [753] and introduces illness called by the Seri *syexhis. ?e . kemep* which may end fatally. People of all sexes and ages are subject to it equally, and the illness may last three months, and there is no